



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-3696; Directorate Identifier 2015-NM-113-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Airbus Model A318, A319, A320, and A321 series airplanes. This proposed AD was prompted by a report of a partial loss of the no-back brake (NBB) efficiency during endurance qualification tests on the trimmable horizontal stabilizer actuator (THSA). This proposed AD would require inspecting certain THSAs to determine the number of total flight cycles the THSA has accumulated, and replacing the THSA if necessary. We are proposing this AD to prevent premature wear of the carbon friction disks on the NBB of the THSA, which could lead to reduced braking efficiency in certain load conditions, and, in conjunction with the inability of the power gear train to keep the ball screw in its last commanded position, could result in uncommanded movements of the trimmable horizontal stabilizer and loss of control of the airplane.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus, Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3696; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal

holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2016-3696; Directorate Identifier 2015-NM-113-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA Airworthiness Directive 2015-0080, dated May 7, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for all Airbus Model A318, A319, A320, and A321 series airplanes. The MCAI states:

During endurance qualification tests on A380 Trimmable Horizontal Stabilizer Actuator (THSA), a partial loss of the no-back brake (NBB) efficiency was experienced. Investigation results concluded that this particular malfunction was due to an ageing/endurance issue of the surfaces of the NBB carbon friction disks, leading to a partial loss of braking efficiency in some specific aerodynamic load conditions.

Due to design similarity on A320 family fleet, the same tests were initiated by the THSA manufacturer on certain SA type THSA, sampled from the field. Subject tests confirmed that THSA Part Number (P/N) 47145 series, as installed on A320 family aeroplanes, are also affected by this partial loss of NBB efficiency.

This condition, if not detected and corrected, and in conjunction with the power gear train not able to keep the ball screw in its last commanded position, could lead to an uncommanded movement of the THS, possibly resulting in loss of control of the aeroplane.

For the reasons described above, this [EASA] AD requires [inspecting certain THSAs to determine the number of total flight cycles the THSA has accumulated and replacing THSAs having certain total flight cycles.] * * *.

You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3696.

Related Service Information under 1 CFR part 51

Airbus has issued Service Bulletin A320-27-1242, dated February 9, 2015. The service information describes procedures for replacing the THSA with a serviceable THSA. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination and Requirements of this Proposed AD

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

Explanation of Compliance Times

The MCAI requires operators to replace certain THSAs by certain dates. The replacements are done for THSAs exceeding a certain flight cycle limit corresponding to each date. EASA determined that accomplishing the replacements by these dates is necessary in order to address the identified unsafe condition. Therefore, we are also specifying compliance dates in this proposed AD.

Costs of Compliance

We estimate that this proposed AD affects 959 airplanes of U.S. registry.

We also estimate that it would take about 1 work-hour per product to comply with the basic requirements of this proposed AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$81,515, or \$85 per product.

In addition, we estimate that any necessary follow-on actions would take about 21 work-hours and require parts costing \$26,500, for a cost of \$28,285 per product. We have no way of determining the number of aircraft that might need this action.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Airbus: Docket No. FAA-2016-3696; Directorate Identifier 2015-NM-113-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus airplanes, certificated in any category, identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD, all manufacturer serial numbers.

(1) Model A318-111, -112, -121, and -122 airplanes.

(2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.

(3) Model A320-211, -212, -214, -231, -232, and -233 airplanes.

(4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 27, Flight Controls.

(e) Reason

This AD was prompted by a report of a partial loss of the no-back brake (NBB) efficiency during endurance qualification tests on the trimmable horizontal stabilizer actuator (THSA). We are issuing this AD to prevent premature wear of the carbon

friction disks on the NBB of the THSA, which could lead to reduced braking efficiency in certain load conditions, and, in conjunction with the inability of the power gear train to keep the ball screw in its last commanded position, could result in uncommanded movements of the trimmable horizontal stabilizer and loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection to Determine THSA Part Number and Accumulated Total Flight Cycles

Not later than each date specified in paragraphs (g)(1) through (g)(5) of this AD: Inspect the THSA to determine if it has a part number (P/N) 47145-(XXX), and, if any THSA P/N 47145-(XXX) is found, determine the total number of flight cycles accumulated since the THSA's first installation on an airplane, or since the most recent NBB replacement, whichever is later. A review of airplane delivery or maintenance records is acceptable in lieu of this inspection if the part number of the THSA can be conclusively determined from that review. In case maintenance records concerning the most recent NBB disk replacement are unavailable or incomplete, the total flight cycles accumulated since first installation of the THSA on an airplane apply.

(1) As of the effective date of this AD: The THSA flight-cycle limit (since first installation on an airplane, or since the most recent NBB replacement, whichever is later) is 40,000 total flight cycles.

(2) As of December 31, 2016: The THSA flight-cycle limit (since first installation on an airplane, or since the most recent NBB replacement, whichever is later) is 36,000 total flight cycles.

(3) As of December 31, 2017: The THSA flight-cycle limit (since first installation on an airplane, or since the most recent NBB replacement, whichever is later) is 33,600 total flight cycles.

(4) As of December 31, 2018: The THSA flight-cycle limit (since first installation on an airplane, or since the most recent NBB replacement, whichever is later) is 31,600 total flight cycles.

(5) As of December 31, 2019: The THSA flight-cycle limit (since first installation on an airplane, or since the most recent NBB replacement, whichever is later) is 30,000 total flight cycles.

(h) Replacements

For airplanes with any THSA P/N 47145-(XXX): Do the replacements required by paragraphs (h)(1) and (h)(2) of this AD.

(1) Not later than each date specified in paragraphs (g)(1) through (g)(5) of this AD, replace all THSA that have reached or exceeded on each date the corresponding number of flight cycles specified in paragraphs (g)(1) through (g)(5) of this AD. Do the replacement in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-27-1242, dated February 9, 2015. Affected THSAs must be replaced with serviceable THSAs.

(2) As of each date specified in paragraphs (g)(1) through (g)(5) of this AD, and before exceeding the flight cycle limit corresponding to each date, as applicable: Replace each THSA with a serviceable THSA, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-27-1242, dated February 9, 2015.

(i) Definition of Serviceable THSA

For the purposes of this AD: A serviceable THSA is a THSA that has not exceeded the applicable flight-cycle-limits, as specified paragraphs (g)(1) through (g)(5) of this AD, since first installation of the THSA on an airplane or since last NBB replacement, whichever is later.

Note 1 to paragraph (i) of this AD: Guidance for NBB disc replacement can be found in UTC Aerospace Systems Service Bulletin 47145-27-17, Revision 1, dated July 21, 2015.

(j) Parts Installation Limitation

As of each date specified in paragraphs (g)(1) through (g)(5) of this AD, as applicable, installation of a THSA P/N 47145-(XXX) is allowed on an airplane, provided the THSA is a serviceable THSA.

(k) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1405; fax 425-227-1149. Information may

be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Airbus's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(l) Special Flight Permits

Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

(m) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0080, dated May 7, 2015, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-3696.

(2) For service information identified in this AD, contact Airbus, Airworthiness Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com; Internet <http://www.airbus.com>. You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on February 8, 2016.

Michael Kaszycki,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2016-03133 Filed: 2/16/2016 8:45 am; Publication Date: 2/17/2016]